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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/397,494	09/15/1999	DAVID J. BALABAN	18547-037510	8817

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EXAMINER

WEST, JEFFREY R

ART UNIT PAPER NUMBER

2857

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/397,494

Applicant(s)

BALABAN ET AL.

Examiner

Jeffrey R. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 26-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. The notice of Non-Responsive Amendment filed on January 17, 2003 is hereby withdrawn as the filing of a CPA on August 13, 2002 was a proper response.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "102" (page 5, line 22 and page 8, line 34), "110" (page 6, line 16), "304" (page 17, line 23), "918" (page 18, line 25), and "306" (page 19, line 18). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawing in Figure 2A is objected to because the "SCSI Host Adapter" is labeled "230" instead of "236" as disclosed on page 8, lines 14 and 15.

### ***Specification***

4. The abstract of the disclosure is objected to because its length exceeds the 150 word limit. Correction is required. See MPEP § 608.01(b).
5. The disclosure is objected to because of the following informalities:

On page 8, line 6, the "host computer system" is incorrectly labeled "10" instead of "210" as it is labeled on page 8, line 10, and in Figure 2A.

On page 8, line 16, the "fixed disk" is incorrectly labeled "244" instead of "242" as it is labeled on page 8, line 15, and in Figure 2A.

On page 3, line 20 and page 10, line 22, Applicant refers to a web address that does not appear to be accessible.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,100,030 to McCasky Feazel et al. in view of U.S. Patent No. 6,355,423 to Rothberg et al.

McCasky Feazel discloses the use of selective DNA fragment amplification products for hybridization-based genetic fingerprinting, marker assisted selection, and high-throughput screening for use in a laboratory experiment (abstract) comprising accepting signals/input data from a user input device, through a computer interface, inherently with associated instructions (column 43, lines 27-38),

to define a parameter of an experiment, including data to define a probe array image identifier (column 50, lines 42-49 and column 52, lines 54-62) and a probe array analysis set and type (i.e. experiment ID, sample ID, and plate type) (column 44, lines 10-35) by displaying setup prompts on a corresponding display (column 44, line 60 to column 45, line 3, column 45, lines 52-63, and column 44, lines 10-35).

McCasky Feazel also discloses exporting/transferring the received parameters to a processor to generate experimental results (column 44, lines 36-38) and display the experimental results experiment/array images (column 53, lines 1-3), indicating hybridization information (column 3, lines 30-56), as well as displaying the current state of the experimental operation (column 49, lines 31-43). McCasky Feazel also discloses receiving from the user signals/data indicating a target output file (column 46, lines 3-18).

While McCasky Feazel does describe producing and exporting a target output file, McCasky Feazel doesn't specifically disclose conducting the experiment over a network (i.e. transferring parameters to a network and receiving experiential results from the network) or providing a target database for publishing experiment results.

Rothberg teaches a method and device for measuring differential gene expression by retrieving specific types of sequence sets of nucleic acids in a sample simultaneously and in parallel by hybridization of additional subsequences to an array of probes of different types (column 6, lines 26-51) and interpreting the sequence sets with reference to a database of known sequences (column 5, lines 7-27) wherein the user inputs information regarding the type of manipulations and

comparisons that are to be executed (column 38, lines 20-39). Rothberg also teaches that the input/output devices for receiving input data, such as a specific probe types (column 24, lines 24-25), are connected to the processing device by way of a network (column 38, line 56 to column 39, line 7), such as a LAN (column 39, lines 35-43), as well as providing a connection to the Internet and/or database systems for publishing updated results (column 39, lines 26-34).

It would have been obvious to one having ordinary skill in the art to modify the invention of McCasky Feazel to include conducting the experiment over a network, as taught by Rothberg, since performing remote experiments across a network is well known to adhere to local space constraints and provide access to information not locally available, and further, as suggested by Rothberg, the combination would have provided access to processing systems of sufficient speed, size, and complexity as well as allowed for the retrieval of updated accurate data (column 39, lines 8-34).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. 5,571,639 to Hubbell et al. teaches a computer-aided engineering system for design of sequence arrays and lithographic masks comprising a user interface for receiving desired characteristics of a gene of interest or other array features in order to output an array chip descriptions that permits easy

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access to all relevant information about the sequence of a probe, its location on the chip, and its relevant to a particular study.

U.S. Patent No. 6,345,115 to Ramm et al. teaches a digital imaging system for assays in well plates, gels, and blots.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw  
March 19, 2003

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800